

are still in use ; as are also his improved elements of *Ceres*, given in the only paper he ever contributed to this Society (*Monthly Notices*, vol. xxxviii. p. 119). In 1866 he published his "Auxiliary Tables for Computing an Approximate Ephemeris of a Minor Planet." He retired from office on account of the age-limit in 1890, and died on 1897 May 19.

He was elected a Fellow of the Society on 1872 January 12.

ADAM HILGER was born in Darmstadt in 1839, and in his early youth he showed a marked inclination for the mechanical work in which his father was then engaged. For some years he worked as a mechanical engineer in the Mint at Darmstadt, and afterwards entered Ertel's famous establishment at Munich. He next came to London, but soon left for Paris, where he had the good fortune to find employment with the firm of opticians, Lerebours & Secretan. During this engagement he constructed many instruments under the direct supervision of Foucault, and became acquainted with the theory as well as the practice of his art. After the war of 1870 he came to London, and became foreman with Mr. John Browning. Having completed a five years' contract he began business on his own account in Stanhope Street.

In the early memoirs of the pioneers in celestial spectroscopy both at home and abroad, references to Hilger's name are frequently to be found. He supplied many of the instruments with which the researches were carried out, thus gaining reputation and experience which he never ceased to increase. At the time of his death he was engaged upon work for all parts of the world, and his loss will be widely felt. He was always ready to undertake new work in which special difficulties had to be met, and he brought to it not only a wide practical experience but also an eager and active habit of mind. He paid special attention to the cutting and working of quartz and Iceland spar prisms, and had lately made very successful achromatic combinations of lenses, in which only natural crystals were used, and which were specially suitable for work with ultra-violet light.

Amongst many other matters which had engaged his time and thoughts, we may refer to one in particular in the hope that it may receive further attention and be brought to perfection—viz. a form of governor for controlling clockwork in cases where there are considerable variations in the power or the load.

Mr. Hilger died on 1897 April 23, at Brighton, from the effects of a bicycle accident.

He was elected a Fellow of the Society on 1892 February 10.

JOSEPH MAGUIRE was born at Corstoon, Drumconrath, co. Meath, in or about the year 1800. [The register of his birth cannot be found. He himself believed that he was a centenarian, but evidence, collected after his death, points to the conclusion that his age was ninety-six.] He died on 1896 April 8 at his

residence, 12 Grove Road, Lakenham, Norwich, and was buried with Roman Catholic rites.

He was an able land surveyor, and after being engaged for many years in surveys in the North of England, became managing clerk to Messrs. Wright and Woodrow, the principal land agents in Norwich. He married, in 1864, Miss Harriet Agnes Pettit, daughter of an organist and composer in Norwich. His wife predeceased him, and there was no family. He retired from business some twenty years ago, but continued to live in the same residence till his death.

He contributed several papers to the *Monthly Notices* on eclipses and occultations. His last two papers, published in 1885, give particulars of the thirteen total solar eclipses which have been visible in the British Isles between 878 and 1724, two excellent maps showing the lines of totality. The last sentence of one of these papers may perhaps be quoted :

“It appears from the limiting lines of these eclipses that London has been twice totally eclipsed, Dublin twice, and Edinburgh five times ; and, assuming the calculations to be correct, the Moon’s shadow would have fallen upon every spot of the British Isles except a small space at Dingle, on the west coast of Ireland.”

The calculations were made some ten years before publication of the paper ; but even then the author was in the seventies. The tables used were generally Hansen’s. Among the papers found at his death was a map of the British Isles showing the course of the 1927 eclipse, which suggests that he contemplated continuing this work, but was no doubt prevented by advancing age. He was elected a Fellow of the Society on 1865 February 10.

ALBERT MARTH was born at Colberg, in Pomerania, on 1828 May 5, and was left an orphan at an early age. The desire of his mother had been that he should enter the Church, but after some time devoted to the study of Hebrew and theology, his early enthusiasm for mathematical science asserted itself, and he resolved to apply himself exclusively to astronomy, which he studied at the University of Berlin, subsequently going to Königsberg, where he became a pupil, and then an assistant of Dr. C. A. F. Peters, professor of astronomy at that university. A schoolfellow of his once said, “Marth may study what he likes, but he is and always will be an astronomer.” This early prediction was amply fulfilled in after years, for throughout his life Marth devoted himself solely to that science ; indeed, among the numerous memoirs and papers he published, which evince his wide knowledge of general astronomy, we do not find one dealing with any other subject. It cannot be doubted, however, that the influence of a master of such consummate ability as Peters largely contributed to develop in Marth that accurate conception of astronomical problems which he in many ways so conspicuously displayed.

Marth’s earlier contributions to astronomy were all published